

Notice of Allowability

Application No.

10/816,062

Examiner

Craig A. Renner

Applicant(s)

GUTHRIE ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper(s) filed 11 December 2006.
2. ☒ The allowed claim(s) is/are 2-7 (renumbered 1, 5, 2-4 and 6, respectively).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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1. The drawings were received on 11 December 2006. These drawings are accepted.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for the examiner's amendment to the claims was given in a telephone interview with Ronald B. Feece on 29 December 2006.

3. The application has been amended as follows:

IN THE TITLE:

The title has been amended to read as follows:

--MAGNETIC WRITE HEAD WITH GAP TERMINATION LESS THAN
HALF DISTANCE BETWEEN PEDESTAL AND BACK GAP--.

IN THE CLAIMS:

The claim listing has been amended to read as follows:

1. (Canceled).
2. (Currently amended) A magnetic write head, comprising:
 - a magnetic pole having first and second ends;
 - a magnetic pedestal formed over said magnetic pole at said first end of said magnetic pole;
 - a magnetic back gap layer formed over said magnetic pole at said second end of said magnetic pole, said pedestal and said back gap layer having a distance therebetween;
 - a non magnetic write gap material formed over said pedestal, extending toward said back gap layer and having a termination between said pedestal and said back gap layer; and
 - a magnetic layer formed over said back gap layer, extending toward said pedestal and terminating at said termination of said non magnetic write gap material;
 - wherein said non magnetic write gap material extends less than half said distance between said pedestal and said back gap layer.
3. (Currently amended) A magnetic write head, comprising:
 - a magnetic pole having first and second ends;
 - a magnetic pedestal formed over said magnetic pole at said first end of said magnetic pole;

a magnetic back gap layer formed over said magnetic pole at said second end of said magnetic pole, said pedestal and said back gap layer having a distance therebetween;

a non magnetic write gap material formed over said pedestal, extending toward said back gap layer and having a termination between said pedestal and said back gap layer; and

a magnetic layer formed over said back gap layer, extending toward said pedestal and terminating at said termination of said write gap material;

wherein said non magnetic write gap material extends less than 20 percent said distance between said magnetic pedestal and said back gap layer.

4. (Currently amended) A magnetic write head as in claim 2, wherein said write gap material is Rh.

5. (Currently amended) A magnetic write head ~~, comprising: a magnetic pole having first and second ends; a magnetic pedestal formed over said magnetic pole at said first end of said magnetic pole; a magnetic back gap layer formed over said magnetic pole at said second end of said magnetic pole, said pedestal and said back gap having a distance therebetween; a non magnetic write gap material formed over said pedestal, extending toward said back gap and having a termination between said pedestal and said back gap; and a magnetic layer formed over said back gap, extending~~

~~toward said pedestal and terminating at said termination of said write gap material;~~ as
in claim 2, wherein said magnetic layer formed over said back gap layer is NiFe.

6. (Currently amended) A magnetic write head as in claim 2, further comprising a second magnetic pole extending from said back gap layer to said pedestal, said second pole being magnetically connected with said back gap layer and being separated from said pedestal by said write gap ~~layer~~ material.

7. (Currently amended) A magnetic write head, comprising:

- a first magnetic pole having first and second ends;
- a first magnetic pedestal formed over said first magnetic pole at said first end;
- a first magnetic back gap layer formed over said first magnetic pole at said second end, said pedestal and said back gap layer having a distance therebetween;
- a first material formed over said pedestal, said first material being electrically conductive and non-magnetic, said first material terminating at a termination point located between the first pedestal and the first magnetic back gap layer;
- a second material formed over said first back gap layer, said second material being electrically conductive and magnetic and being a different material than said first material;
- a second pedestal formed over said first material over said first pedestal;
- a second back gap layer formed over said second material ~~layer~~ over said first back gap layer; and

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a second magnetic pole extending between and magnetically connecting said second pedestal and said second back gap layer,


wherein said termination of said first material is located less than half the distance between the first magnetic pedestal and the first back gap layer.

8-22. (Canceled).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Monday-Tuesday & Thursday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Craig A. Renner
Primary Examiner
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